

IN THE CLAIMS:

Please amend the following claims:

1 1. (Currently Amended) [A] An isolated mutant of *Lactococcus lactis* spp. *lactis*,
 2 which produces lactate at high volumetric productivity, which is at least twice that of the
 3 *Lactococcus lactis* spp. *lactis* 19435, and produces lactate at specific productivity, which is at
 4 least 1.5 times that of the *Lactococcus lactis* spp. *lactis* 19435, and produces high amounts of
 5 lactate dehydrogenase, which is at least twenty times that of the *Lactococcus lactis* spp. *lactis*
 6 19435 and wherein denoted TMB5003, deposited at Deutsche Sammlung von Microorganismen
 7 und Zellkulturen under deposition number DSM 14489.

1 2.(Cancelled)

1 3. (Original) The use of *Lactococcus lactis* spp. *lactis* TMB5003 in the production of
 2 lactate.

1 4. (Currently Amended) The use of *Lactococcus lactis* spp. *lactis* TMB5003 for the
 2 production of the enzyme lactate dehydrogenase, LDH[~~in particular L-lactate dehydrogenase,~~
 3 ~~L-LDH~~].

1 5. (Currently Amended) A method for the production of lactate on a glucose containing
 2 medium, wherein an inoculum of *Lactococcus lactis* spp. *lactis* TMB5003 is grown on a
 3 medium comprising glucose as carbon source[~~-~~], and the lactate thus formed is isolated.

1 6. (Previously Amended) A method according to claim 5, wherein the growth is
 2 carried at conditions optimized for production of L-lactate.

1 6. (Previously Amended) A method according to claim 5, wherein the growth is
2 carried at conditions optimized for production of L-lactate.

1 7. (Previously Amended) A method according to claim 6, wherein the growth is
2 continuous at a dilution rate of at least 0.5 h^{-1} .

1 8. (Previously Amended) A method according to claim 7, wherein the growth is
2 continuous at a dilution rate of at least 0.7 h^{-1} .

1 9. (Previously Amended) A method according to claim 8, wherein the growth is
2 continuous at a dilution rate of at least 0.8 h^{-1} .

1 10. (Previously Amended) A method according to claim 5, wherein the growth is
2 carried out at unrestricted feed of glucose.

1 11. (Currently Amended) A method according to claim 5, wherein the growth is
2 carried out at a pH of above 6 [~~preferably~~ $6-7$].

1 12. (Currently Amended) A method according to claim 5, wherein the growth is
2 carried out at a temperature of between 25 and 30 C [~~preferably~~ 27.5 to $30 \text{ }^{\circ}\text{C}$].

1 13. (Original) The use of lactate produced by fermenting the mutant *Lactococcus lactis*
2 spp. *lactis* TMB5003 in food and as a chemical commodity in general.

1 14. (New) The use of *Lactococcus lactis* spp. *lactis* TMB5003 according to claim 4,
2 wherein the enzyme lactate dehydrogenase, LDH is L-Lactate dehydrogenase, L-LDH.

1 15. (New) The method according to claim 11, wherein the pH is 6-7.

- 1 16. (New) The method according to claim 12, wherein the temperature is 27.7 to
2 30 C.